EUROPEAN PATENT OF

Patent Abstracts of Japan

PUBLICATION NUMBER

04001140

PUBLICATION DATE

06-01-92

APPLICATION DATE

13-04-90

APPLICATION NUMBER

02099174

APPLICANT: MICROBIAL CHEM RES FOUND;

INVENTOR: NAGAI MACHIKO;

INT.CL.

C07B 41/06 C07C271/18 C07D207/16

C07K 1/02 C07K 5/06 // A61K 37/64

B01J 31/02

H - CH - CO - C

TITLE

PRODUCTION OF

3-AMINO-2-OXOFATTY ACID

DERIVATIVE

ABSTRACT:

PURPOSE: To produce a physiologically active substance having 3-amino-2- oxocarbonyl group by oxidizing a 3-amino-2-hydroxyfatty acid derivative with an oxidizing agent such as DMSO and, as necessary, eliminating protecting group.

CONSTITUTION: The objective compound having a partial structural formula II can be produced by oxidizing a compound having partial structural formula I (R₁ is saturated or unsaturated hydrocarbon group) and, as necessary, eliminating protecting group. The reaction is preferably carried out under a mild condition not to exert adverse effect to the compound except for the oxidation at 2-site. Preferably, DMSO is used as the oxidizing agent and a combination of a weak base and an acid (preferably salt of trifluoroacetic acid and pyridines) as a catalyst. Further, it is preferable to use a carbodiimide, acetic anhydride, oxalyl chloride, etc., in combination with the above compounds, The reaction is carried out at 0-40°C for 3-50hr in DMSO or other solvent.

COPYRIGHT: (C)1992,JPO&Japio